

Supporting Information

Huang et al. 10.1073/pnas.1316622110

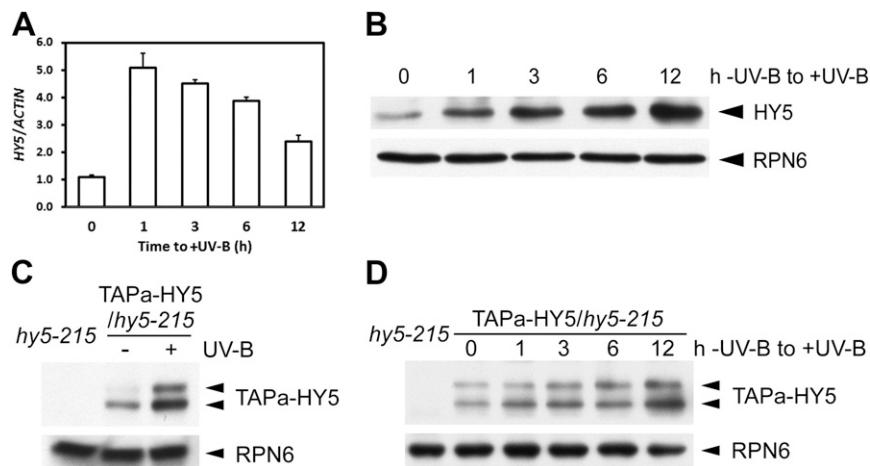


Fig. S1. (A and B) The mRNA (A) and protein (B) levels of ELONGATED HYPOCOTYL 5 (HY5) in response to photomorphogenic UV-B irradiation in Columbia (Col) seedlings grown under –UV-B for 4 d and then transferred to +UV-B for the indicated time. REGULATORY PARTICLE NON-ATPASE 6 (RPN6) is the loading control. (C and D) The effect of photomorphogenic UV-B on HY5 protein accumulation. Immunoblot analysis using 4-d-old alternative tandem affinity purification tag (TAPa-HY5)/hy5-215 seedlings grown under –UV-B and +UV-B (C) or transferred from –UV-B to +UV-B for the indicated time (D).

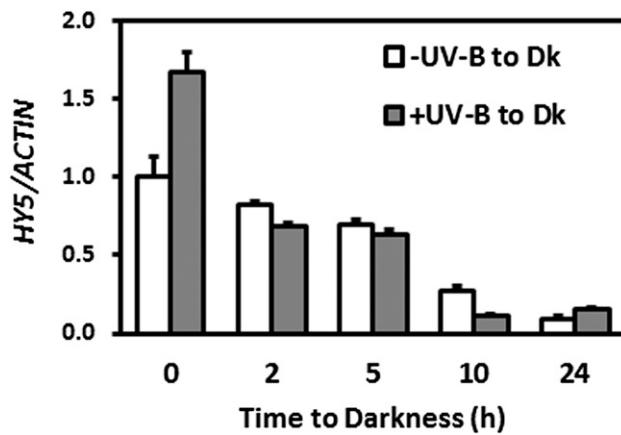


Fig. S2. The mRNA levels of HY5 in Col seedlings grown under –UV-B or +UV-B for 4 d and then transferred to darkness for the indicated time.

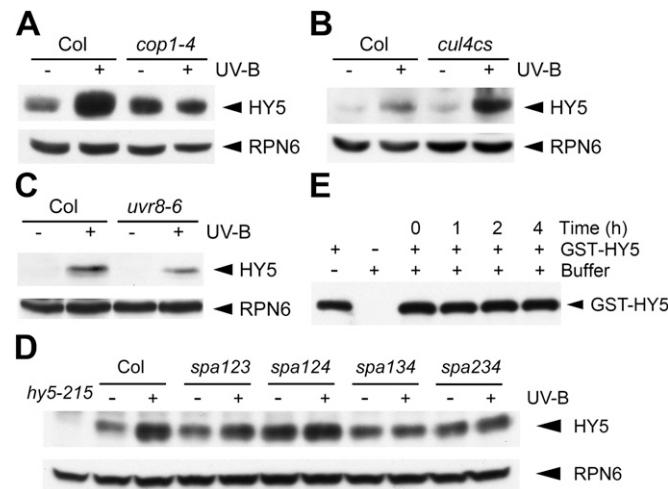


Fig. S3. The protein levels of HY5 in 4-d-old –UV-B– and +UV-B–grown seedlings of Col, *cop1-4* (A), *cul4cs* (B), *uvr8-6* (C), and *spa* (D) mutants. (E) Immunoblot analysis of recombinant GST-HY5 in the cell-free degradation buffer without cell extracts at 22 °C for the indicated time.

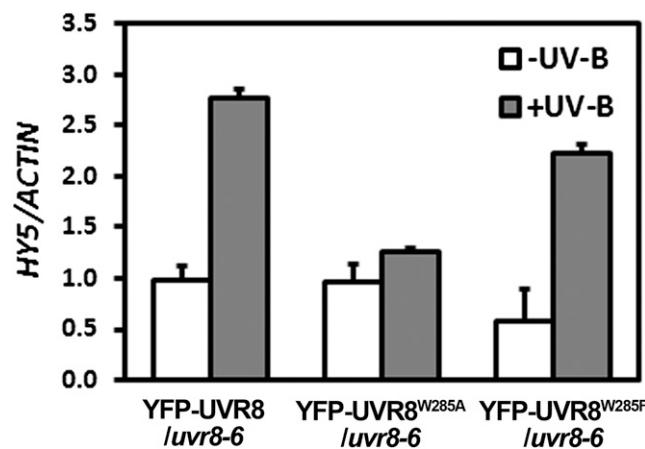


Fig. S4. The mRNA levels of *HY5* in 4-d-old –UV-B– and +UV-B–grown seedlings of YFP-UV RESISTANCE LOCUS 8 (UVR8)/*uvr8-6*, YFP-UVR8^{W285A}/uvr8-6, and YFP-UVR8^{W285F}/uvr8-6.

Table S1. Summary of primers used in this study

Assay	Construct	Primer ID	Primer sequence
Generation of transgenic plants	pF3PZPY122-UVR8	UVR8 5' KpnI	ATACGGTACCATGGCGGAGGATATGGCT
	pJIM 19 (KAN)-FLAG-UVR8	UVR8 3' Xhol SacI	ATACCTCGAGGAGCTCTCAAATTCTGACACGCTT
	pEarleyGate 104- <i>proUVR8-YFP-UVR8</i>	proUVR8 5' AflII	ATACCTTAAGGTATAATAGTACTTCCAATGGC
	pEarleyGate 104- <i>proUVR8-YFP-UVR8</i> ^{W285A}	proUVR8 3' AatII	ATACGACGTCTCACAGTTGCAGTTTCACAAG
	pEarleyGate 104- <i>proUVR8-YFP-UVR8</i> ^{W285F}	UVR8 W285A-F	TCTCCAGATTCGGGAGGTGCGAGACATACAATGGCATTGACTT
		UVR8 W285A-R	AAGTCATGCCATTGTATGTCGACCTCCGAATCTGGAGA
		UVR8 W285F-F	TCTCCAGATTCGGGAGGTTTAGACATACAATGGCATTGACTT
		UVR8 W285F-R	AAGTCATGCCATTGTATGTCAAAACCTCCGAATCTGGAGA
qRT-PCR		CHS-F	ACGTCACTGTTGAGCGAGTATGG
		CHS-R	GAGGAACGCTGTGCAAGACGACTG
		At4g15480-F	AGTCGGGTTTATCGTTCT
		At4g15480-R	ATCCCTTACCTTAGCAC
		ELIP2-F	CACCACAAATGCCAACAGTCT
		ELIP2-R	TGCTAGTCTCCCGTTGATCC
		HY5-F	TCAGAACGAGAACGAGATGCTTAG
		HY5-R	TTAGAACACCACCACCTCCTC
Yeast three-hybrid	pGADT7-COP1 (no AD)	Y3H COP1 5' KpnI	ATACGGTACCGCCATGGAAGAGATTCGACGGA
		Y3H COP1 3' EcoRI	ATACGAATTCTCACGCAGCAGTACCGAACT

AD, activation domain; COP1, CONSTITUTIVE PHOTOMORPHOGENESIS 1.